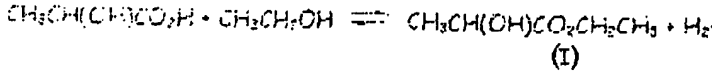
This listing of claims will replace the prior version in the application.

Claims

1. (currently amended) A continuous process for the preparation of ethyl lactate (I) by esterification of lactic acid ~~[~~or of a lactic acid composition] using ethanol, according to the reaction (1):



$$CH_3CH(OH)CO_2H + CH_3CH_2OH \rightleftharpoons \underset{(I)}{CH_3CH(OH)CO_2CH_2CH_3} + H_2O \quad (1)$$

which ~~consists in~~ comprises reacting said lactic acid or lactic acid composition with ethanol ~~according to~~ at an ethanol/lactic acid initial molar ratio at least equal to 2.5, in the presence of a catalyst, at reflux of the reaction medium, ~~which lies~~ at approximately 100°C, and under an absolute pressure ranging from 1.5 to 3 bar ~~and preferably ranging from 1.5 to 1.8 bar~~; said process being characterized in that ~~a~~ an azeotrope or azeotrope like water/ethanol gas mixture ~~close to the azeotrope~~ is continuously extracted from the esterification reaction medium, in that this gas mixture is then dehydrated directly using molecular sieves, in that an ethanol gas stream, which can be recycled to the esterification reaction medium, and a stream composed of water and of ethanol are then recovered from said dehydration, which stream composed of water and of ethanol is subjected to a distillation, from which water and a water/ethanol azeotrope are obtained, which water/ethanol azeotrope is injected at the top of the column for the distillation of the gas mixture extracted from the esterification reaction medium, and in that crude ethyl lactate is then continuously extracted, which crude ethyl lactate is subjected to purification, from which an ethyl lactate of high purity and heavy products are obtained.

2. (currently amended) The process as claimed in claim 1, ~~characterized in that use is made of an~~ wherein the ethanol/lactic acid initial molar ratio ~~ranging~~ ranges from 3 to 4.

3. (currently amended) The process as claimed in claim 1 ~~or 2~~, characterized in that, for the dehydration of the gas mixture extracted from the reaction

medium using molecular sieve, the ~~PSA (~~Pressure Swing Adsorption~~)~~ technique is used.

4. (currently amended) The process as claimed in claim 3, characterized in that the selective adsorption of water, by passing, at a pressure identical to that applied to the esterification reaction medium, the azeotrope or azeotrope like water/ethanol mixture ~~close to the azeotrope~~ in the gas form through a bed of molecular sieve, and then the desorption of the water adsorbed beforehand, by lowering the pressure below 300 mbar ~~and preferably below 100 mbar~~, are carried out alternately.

5. (previously presented) The process as claimed in claim 1, characterized in that the heavy products resulting from the purification of the ethyl lactate are recycled in the esterification reaction medium.

6. (new) The process as claimed in claim 1, characterized in that the absolute pressure ranges form 1.5 to 18 bar.

7. (new) The process as clamed in claim 4, characterized in that the desorption is carried out by lowering the pressure below 100 mbar.

Respectfully submitted,

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